

Title (en)

PHOSPHOR, PRODUCTION METHOD FOR SAME, AND LIGHT-EMITTING DEVICE

Title (de)

PHOSPHOR, VERFAHREN ZU DESSEN HERSTELLUNG UND LICHEMITTIERENDE VORRICHTUNG

Title (fr)

PHOSPHORE, SON PROCÉDÉ DE PRODUCTION ET DISPOSITIF ÉLECTROLUMINESCENT

Publication

**EP 2671938 A1 20131211 (EN)**

Application

**EP 12741596 A 20120203**

Priority

- JP 2011023435 A 20110206
- JP 2012052494 W 20120203

Abstract (en)

A phosphor indicated by general formula  $Me_a R_b Si_c Al_d N_e O_f$ . In the formula: Me has Sr as an essential element thereof and can include one or more types of element selected from Na, Li, Mg, Ca, Ba, Sc, Y, and La; and Re has Eu as an essential element thereof and can include one or more types of element selected from Mn, Ce, Tb, Yb, and Sm. In addition, when  $a=1-x$ ,  $b=x$ ,  $c=(2+2p)x(1-y)$ ,  $d=(2+2p)xy$ ,  $e=(1+4p)x(1-z)$ , and  $F(1+4p)xz$ , parameters  $p$ ,  $x$ ,  $y$ , and  $z$  fulfill the following:  $1.620 < p < 1.635$ ,  $0.005 < x < 0.300$ ,  $0.200 < y < 0.250$ , and  $0.070 < z < 0.110$ . A light-emitting device with high luminance is provided by using this phosphor.

IPC 8 full level

**C09K 11/64** (2006.01); **H01L 33/50** (2010.01)

CPC (source: EP KR US)

**C09K 11/0883** (2013.01 - EP KR US); **C09K 11/7731** (2013.01 - EP KR US); **C09K 11/77348** (2021.01 - EP KR US);  
**C09K 11/77928** (2021.01 - KR); **F21V 9/30** (2018.01 - KR); **G02F 1/133602** (2013.01 - KR); **H01L 33/502** (2013.01 - KR);  
**H05B 33/12** (2013.01 - US)

Cited by

KR20160132959A; US10611961B2; WO2015135888A1

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AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2671938 A1 20131211**; **EP 2671938 A4 20141029**; **EP 2671938 B1 20160928**; CN 103347979 A 20131009; CN 103347979 B 20160608;  
JP 2012162633 A 20120830; JP 5697473 B2 20150408; KR 101525338 B1 20150603; KR 20130101133 A 20130912;  
TW 201239068 A 20121001; TW 1458809 B 20141101; US 2014028179 A1 20140130; US 9624428 B2 20170418; WO 2012105688 A1 20120809

DOCDB simple family (application)

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